Division of Environmental Health
Solid Waste Program
410 Willoughby Avenue, Suite 303 **Telephone: (907) 465-5162**
Juneau, Alaska 99801-1795 **Fax: (907) 465-5362**
http://www.state.ak.us/dec/home.htm

June 13, 2001

CERTIFIED MAIL - RETURN RECEIPT REQUESTED # 7000-0520-0025-2109-5211

Alice Bullington, Senior Environmental Coordinator
Phillips Alaska, Inc.
POB 100360
Anchorage, Alaska 99510-0360

RE: Solid Waste Permit # 0121-BA002

Dear Ms. Bullington:

The Department of Environmental conservation has completed its evaluation of your permit application dated April 4, 2001 for treatment (grinding) of RCRA exempt, non-hazardous exploration and production (E&P) waste from oil and gas activities and for disposal by injection at an injection well approved by the Alaska Oil and Gas Conservation Commission (AOGCC), the construction and operation of a lined E&P waste cell at DS-2P, and establishes criteria for the analysis and reuse of washed surface hole gravel. This facility is located on the North Slope of Alaska, Drill Site 2-P, Kuparuk River Unit. The Department is issuing this permit in accordance with AS 46, 18 AAC 14, and 18 AAC 60. Please review the conditions and stipulations in the permit and ensure they are all understood. This permit is effective upon issuance and expires June 13, 2006.

Any person who disagrees with this decision may appeal by requesting an adjudicatory hearing, using the procedures contained in 18 AAC 15.200-310. Hearing requests must be delivered to the Commissioner of the Department of Environmental Conservation, 410 Willoughby Avenue,

Juneau, Alaska 99801-1795, within 30 days of receipt of this letter. If a hearing is not requested within 30 days, the right to appeal is waived. Even if an adjudicatory hearing has been requested and granted, all permit conditions remain in full force and effect.

Sincerely,

Heather T. Stockard
Solid Waste Program Manager

HTS/GM/tmh (g:\eh\eh-solid waste\permits\anchorage permits\phillips alaska\meltwater\0121-BA002.doc)

Enclosure: Permit #0121-BA002

STATE OF ALASKA
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL HEALTH
SOLID WASTE PROGRAM
555 CORDOVA STREET
ANCHORAGE, ALASKA 99501

SOLID WASTE TREATMENT FACILITY PERMIT
PHILLIPS ALASKA INC.
MELTWATER GRIND AND INJECT FACILITY

The Alaska Department of Environmental Conservation, Division of Environmental Health, Solid Waste Program, in accordance with the requirements of Alaska Statue 46.03, and Alaska Administrative Code, Title 18, Chapters 15 and 60, as amended or revised, issues a Solid Waste Treatment Facility Permit to:

Phillips Alaska Inc.
Post Office Box 100360
Anchorage, Alaska 99510-0360
For The Meltwater Development Project DS-2P Grind and Inject Facility

This permit authorizes the treatment (grinding) of RCRA exempt, non-hazardous exploration and production (E&P) waste from oil and gas activities for disposal by injection at an injection well approved by the Alaska Oil and Gas Conservation Commission (AOGCC), the construction and operation of a lined E&P waste cell at DS-2P, and establishes criteria for the analysis and reuse of washed surface hole gravel. This facility is located on the North Slope of Alaska, Drill Site 2-P, Kuparuk River Unit in Section 17, Township 8 North, Range 7 East Umiat Meridian. An application for this treatment facility permit was received by the Department on April 4, 2001. A public notice was published in the Anchorage Daily News, on April 20 & 21, 2001. This project was determined to be consistent with the standards of the Alaska Coastal Management Program on June 13, 2001 and the operation of this facility is subject to the conditions of this permit.

This permit is effective upon issuance and expires June 13, 2006, at which time this permit must be renewed or the facility closed. The Department must receive an application for permit renewal at least 30 days before the permit expiration date. The Department may terminate or modify this permit in accordance with AS 46.03.120.

Heather T. Stockard
Solid Waste Program Manager

This Permit Contains:

- Specific Conditions
  - A. Application Compliance
  - B. Site Preparation
  - C. Waste Cell Development
  - D. Facility Operation
  - E. Monitoring
  - F. Reporting and Recording Keeping
  - G. Waste Cell Closure
  - H. Violation and Enforcement
- General Conditions
- Appendices A and B

SPECIFIC CONDITIONS

A. Application Compliance

1. This permit is based on the application received by the Department on April 4, 2001. The Permittee must comply with the designs and plans submitted in the application, unless modified in this permit. The Permittee may request a permit modification in writing, which must be authorized and signed by the Solid Waste Program Coordinator before the permit modification is effective.

2. A surface water monitoring plan of this permit shall be submitted to the Department prior to the use of the facility. This plan must include a site plan showing the location of the surface water sampling points and comply with 18 AAC 60.810. Surface water quality sampling shall be required during the open water season beginning in 2001, see section E.2 of the permit for further requirements.

B. Site Preparation

1. Signs [18 AAC 60.240(a)]

   The permittee shall:

   install and maintain a readable sign at the facility entrance, which identifies the following information:

   a. Name of the facility and the permittee,
   b. Emergency telephone numbers,
   c. Type of waste processed at the facility, and,
   d. Specify that municipal camp waste and hazardous waste are prohibited.

2. Surface Water Quality Control [18 AAC 60.225, 18 AAC 60.430(c)]

   The permittee shall:

   a. Construct and maintain diversion structures (ditches or berms) and surface grading

as needed to prevent surface water from flowing over, into or through the waste cell, and,

b. Control drainage from the facility to prevent a violation of the water quality standards of 18 AAC 70.

C. Waste Cell Development [18 AAC 60.430(c)]

The permittee shall:

1. Notify in writing, the ADEC Anchorage Solid Waste Program office at least thirty (30) days before a new waste cell is constructed at the facility,

2. Ensure a minimum horizontal separation distance of 100 feet from a drilling waste cell to a private drinking water well, and 200 feet to a public drinking water well,

3. Prepare the interior and bottom of the waste cell as specified by the liner's manufacturer, and provide documentation to the Department that the installation specifications have been satisfied,

4. In order to prevent the migration of pollutants from the facility; line the interior of the waste cell with a liner as described in the application,

5. Ensure the liner is designed and installed in accordance with the manufactures specifications and the integrity of the liner is maintained during all phases of construction, disposal, and closure of the facility, and,

6. Ensure the waste cell liner is:

   a. Continuous over the pit side walls and bottom,

   b. Securely anchored to prevent slippage into the pit,

   c. Designed and installed so that no erosion or other deterioration of the liner results from waste placement or removal,

   d. Protected from damage due to frost action and other freeze/thaw effects, and,

   e. Resistant to, and compatible with, hydrocarbon and drill mud waste.

D. Facility Operation

1. Treatment Facility Operations

   The permittee shall:

   a. Limit the waste stockpiled and treated at the facility to waste approved by the Alaska Oil and Gas Conservation Commission (AOGCC) for Class II injection including: drilling wastes associated with the exploration, development, and production of

crude oil or natural gas, including drilling muds, cuttings, hydrocarbons, brine, acid, sand, pigging waste, vessel clean outs, and emulsions or mixtures of fluids produced from and unique to the operation or maintenance of a well, whether naturally occurring or added for the operation or productivity of the well; drilling wastes include only wastes described in this paragraph which are derived intrinsically from primary field operations, produced from a well, and removed at the drill site or removed at a crude oil production facility by crude oil or waste water treatment process before custody transfer of the crude oil; drilling wastes do not include spent solvents and oils from equipment maintenance activities, discarded chemical products, or fuels, and,

b. Ensure that wastes are stored in a manner that will not damage the impermeability of the waste cell liner, or otherwise jeopardize the integrity of the waste cell liner.

2. Temporary Closure of a Waste Cell.

The permittee shall:

a. Unless otherwise approved by the Department ensure a temporary cover is applied to a waste cell within 90 days:

i. After the waste cell capacity is reached,

ii. If a period of one (1) year has transpired since the last deposition of waste into the waste cell, or,

iii. If the waste cell is not likely to receive waste within a one (1) year time period.

b. The temporary cover shall consist of an impermeable flexible membrane liner placed over the waste cell in conjunction with fluid management to prevent the ponding of water on top of the temporary cap, and,

c. Waste cells in a temporary closure status must be permanently closed in accordance with Section G of this permit. This permanent closure will occur when the facility is closed or the permit expires.

3. Fluid Management

The permittee shall:

a. Maintain a minimum of 2' feet of free board for free liquids within the waste cell to prevent overtopping of fluids. Solids in the waste cell may be piled above the height of the perimeter barrier as long as they are fully contained within the lined area. The 2' feet of free board only applies to free liquids in the waste cell, and,

b. Remove all pumpable liquids from the waste cell as soon as possible to prevent overtopping of fluids and dispose of the liquids in accordance with all applicable state laws and regulations.

4. Washing and Reuse of Surface Hole Gravel

The permittee shall:

a. Wash and reuse surface hole gravel in accordance with the permit application submitted for the Meltwater DS-2P drilling waste treatment facility. Washed gravel that meets the reuse criteria specified in Appendix B is considered an exempt waste and is no longer subject to Solid Waste Management Regulations, 18 AAC 60,

b. Sample washed gravel as described in section E.3 of this permit (Washed Gravel Sampling). Washed gravel that does not pass all of the reuse criteria will be transported to the treatment facility for disposal by injection or to a permitted solid waste disposal facility, and,

c. Submit an annual report (based on a calendar year of activity) of the gravel washing project that includes a cumulative summary of gravel washing activity. This report should include the well number, pass or fail of the reuse criteria standards, reason for fail, date sampled, re-use location or disposal method, volume of cuttings, and an attachment providing copies of chemical analysis as required in Section E.3 (Washed Gravel Sampling). This report should be submitted by March 31 of each year following the year of activity. If no gravel washing activity is conducted in a calendar year, a report stating such is required.

5. Hazardous and Other Prohibited Waste

The permittee shall:

a. Prohibit the storage and treatment of RCRA non-exempt oily wastes (such as used oil filters, shop rags, and absorbents), prohibited chemical waste, radioactive material other than NORM, solvents, corrosives, lead-acid batteries, polychlorinated biphenyl (PCB) fluids, explosives, and any other hazardous waste defined and regulated under 40 CFR 261. Report all spills or discharges of hazardous substances that occur at the facility as described in 18 AAC 75, Article 3, as revised or amended.

6. Prohibitions and Restrictions [18 AAC 60]

The permittee shall:

a. Limit the storage and processing of waste to only that which is approved, and,

b. Ensure that the lined waste cell does not cause a discharge of pollutants to the surface of the land or into surface waters of the State.

E. Monitoring

1. Visual Monitoring [18 AAC 60.800]

The permittee shall:

a. Ensure that a person who is familiar with the requirements of this permit and with the applicable requirements of the Solid Waste Management Regulations, 18 AAC 60, conduct a visual inspection of the facility at least once per month while the G&I facility is operating, receiving and/or storing waste, and maintain a written record of each inspection. The records must be made available to the Department upon request and should be kept in the operating record for the facility.

This visual monitoring program will detect and document:

i. Damage or signs of potential damage to any component of the facility from settlement, ponding, leakage, thermal instability, frost action, erosion, thawing of the waste, or operation at the facility,

ii. Damage or disturbance to the surface water sampling sites,

iii. Violations of permit conditions or the requirements of 18 AAC 60,

iv. Escape of waste or leachate or any unauthorized waste placed in the waste cell,

v. Slippage of the flexible liner or damage to its anchor,

vi. Damage to the structural integrity or containment structure, retaining wall, erosion control, or diversion structure,

vii signs of fire or combustion in the waste cell, and,

viii. Evidence of death or stress to wildlife or vegetation that might be caused by the facility.

b. Upon noticing any permit violation or damage to the facility, immediately notify the ADEC, Solid Waste Program office and initiate any corrective action necessary.

2. Surface Water Monitoring [18 AAC 60.810]

The permittee shall:

a. Collect surface water quality samples once each summer season,

b. Select two surface water sample sites within 200' feet of the waste cell boundary, one upwind and downwind. Mark and identify both surface water quality sample sites in the field and on the facility site plan and place this site plan in the operating record. As soon as open water is available, collect background water quality samples and have the samples analyzed for the parameters listed in Appendix A of this permit. Upon approval for the Department, previously gathered water quality

data for surface waters at the site may be used to establish background water quality,

c. In the event no surface water is available within 200' feet of the waste cell, sample sites will be selected at locations most likely to detect contamination from the cell. Snow must not be placed at the sample site locations and runoff from snow storage areas must not melt into the sample site locations,

d. Ensure surface water monitoring procedures, and consistent sampling and analyses are designed to provide accurate representation of surface water quality within 200' of the waste cell. The owner or operator shall set out the procedures in a handbook or similar document and shall place the document in the operating record and notify the Department when that occurs. The water quality monitoring procedures must include procedures and techniques for:

i. Sample collection,

ii. Sample preservation and shipment,

iii. Analytical procedures,

iv. Chain of custody control,

v. Quality assurance and quality control, and,

vi. Specify frequency of sample collection.

e. Analyze all surface water samples for the parameters listed in Appendix A and submit copies of the surface water quality test results to the Department within thirty (30) days of receipt from the laboratory.

3. Washed Gravel Sampling

The permittee shall:

a. Collect one representative sample per well of washed gravel so long as there is less than 100 cubic yards and at least once per well. The permittee shall conduct laboratory tests to verify that the cuttings meet the requirements for reuse as presented in Appendix B.

4. Corrective Action [18 AAC 60.815]

The permittee shall:

a. At the request of the Department, sample and analyze any surface water and/or ground water if a statistically significant change in water quality is detected at the point of compliance as a result of the surface water monitoring program,

b. Determine the extent of the contamination and if migration from the facility is the

cause of the change in water quality,

c. Evaluate whether the water quality standards in 18 AAC 70 are threatened or exceeded at the point of compliance,

d. Submit written notification to the department within thirty (30) days after detecting a violation of the applicable water quality standards unless the violation occurs in a water body known by the owner or operator to be in use as a drinking water supply, in which case the written notification to the Department must take place immediately after the owner or operator discovers the violation,

e. Take appropriate corrective action to correct a violation or damage, prevent the escape of waste or leachate, and clean up any improper waste disposal if any violation of a permit condition, State regulation, or structural damage to the facility or a monitoring device is observed,

f. Indications of contamination may include, but are not limited to:

i. A sudden, abrupt, or significant increase in any one, or more, pollutants listed in 40 C.F. R Part 258, Appendix I, which are attributed to site operations,

ii. A determination that there is a statistically significant increase over background water quality for one or more of the constituents monitored, and,

iii. For purposes of this permit, contamination of surface and/or ground waters shall be deemed a violation when contaminant levels exceed those levels specified in 18 AAC 70 (Water Quality Standards) except for those parameters documented as having natural background levels already exceeding those limits.

g. A containment structure must be closed in accordance with 18 AAC 60.440 or reconstructed the meet the standards of 18 AAC 60.430(c) within one year after detecting a violation of the water quality standards 18 AAC 70 at the points of compliance.

F. <u>Reporting and Record Keeping</u> [18 AAC 60.235]

The permittee shall:

1. Maintain a facility operating record. The record must be retained at a location that is readily accessible for department review and by employees working at the facility. The operating record must consist of:

a. The permit application and the permit,

b. Inspection records, training procedures, and notification procedures if required by 18 AAC 60.240,

c. Any demonstration, certification, finding, monitoring, testing, or analytical data required by 18 AAC 60.800 - 18 AAC 60.860,

d. Any permit or record required under the Clean Water Act as that Act applies to leachate and storm water discharges,

e. Financial assurance documentation if required under 18 AAC 60.265,

f. The operating plan required in 18 AAC 60.210(b)(9), and,

g. As-built drawings of the waste cell; and any other documents required by this chapter to be kept in the operating record.

2. Notify the department when the procedures for surface water sampling have been set out in a handbook or similar document and placed in the operating record for the facility,

3. Submit a copy of all water quality sampling laboratory test results, as required in Section E.2 (Surface Water Monitoring) of this permit, to the following office of the Department within thirty (30) days from receipt of the laboratory analyses:

Alaska Department of Environmental Conservation
Solid Waste Program
555 Cordova Street
Anchorage, Alaska 99501

4. Submit copies of any water quality monitoring and corrective action monitoring laboratory test results, as required in Section E. 4. (Corrective Action) of this permit, to the above listed office of the Department within thirty (30) days from receipt of the laboratory analyses, and,

5. Submit the annual report (based on a calendar year of activity) of the gravel washing project that includes a cumulative summary of gravel washing activity. This report should include the well number, pass or fail of the reuse criteria standards, reason for fail, date sampled, re-use location or disposal method, volume of cuttings, and an attachment providing copies of chemical analysis as required in Section E.3 (Gravel Washing Monitoring). This report should be submitted by March 31 of each year following the year of activity. If no gravel washing activity is conducted in a calendar year, a report stating such is required.

G. Waste Cell Closure [18 AAC 60.400]

The permittee shall:

1. Notify, in writing, the Department's Anchorage Solid Waste Program at least thirty (30) days before the facility is permanently closed,

2. Ensure their closure activities are inspected by a third party or supervised by the permittee or a representative familiar with the closure requirements of the facility. Written closure verification in the form of a notarized statement must be signed by the permittee and submitted to the Department within 30 days of the final closure action. This closure

verification must include:

a. A statement verifying that the site was closed in accordance with the facility closure requirements of this permit, the date(s) the closure activity took place, and the signature(s) of person(s) who supervised or performed the closure activity certifying that the information provided is true,

3. Remove all waste material from the waste cell,

4. Decommission the waste cell and dispose of all timbers, liners and debris at a permitted solid waste disposal facility,

5. Collect grab samples of the soil and/or water (if available) that were underlying the waste cell and have them analyzed to determine if contamination has occurred,

6. Once the waste cell is removed, submit the test results from underlying soil and/or water analyses (see Section G.5) and photographs showing the decommissioned waste cell site, if the tests results show no statistically significant change in background soil and/or water conditions, and photographs show that the waste cell and waste has been completely removed no post closure care will be required. This documentation must be submitted and approved by the Department before final closure is issued, and,

7. Initiate corrective action and post closure monitoring in accordance with Section E.4. if a statically significant change in background soil and/or water conditions are shown or there is remaining solid waste at the site.

H. Violation and Enforcement

1. Noncompliance with any section of this permit constitutes a violation of the permit,

2. Pollution, as defined in AS 46.03.900, resulting from the operation of this permitted facility, constitutes a violation of this permit, and,

3. A violation of any condition of this permit may result in the imposition of civil penalties in accordance with AS 46.03.760 and/or criminal penalties AS 46.03.790. Additionally, the Permittee may be required to expand monitoring, evaluate impacts, and provide restoration at the site.

GENERAL CONDITIONS

A. Access and Inspection

The Department's representatives shall be allowed access to the Permittee's facilities to conduct scheduled or unscheduled inspections or tests to determine compliance with this permit and State laws and regulations.

B. Availability of Records

Except for information related to confidential processes or methods of manufacture, all application materials and records and reports submitted in accordance with the terms of this permit shall be available for public inspection at the Department's Southcentral Regional Office.

C. Location of Permit and Application

The Permittee shall maintain a copy of this permit and facility plans at the disposal facility or, if that is not feasible, at the Permittee's or operator's place of business.

D. Civil and Criminal Liability

Nothing in this permit shall be construed to relieve the Permittee from civil or criminal penalties for noncompliance, whether or not such noncompliance is due to factors beyond his control, including but not limited to accidents, equipment breakdowns, or labor dispute.

E. Adverse Impacts

The Permittee shall take all necessary means to minimize any adverse impact to the receiving waters or lands resulting from a violation or noncompliance with any limitations specified in this permit, including any additional monitoring needed to determine the nature and impact of the activity in noncompliance. The Permittee shall cleanup and restore all areas adversely impacted by the noncompliance.

F. Cultural or Paleontological Resources

Should cultural or paleontological resources be discovered as a result of this activity, work which would disturb such resources are to be stopped, and the Office of History and Archaeology, Division of Parks and Outdoor Recreation, Department of Natural Resources, is to be notified immediately (907) 269-8721.

G. Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, nor does it authorize any damage to private property.

H. Modifications or Changes

This permit authorizes only that operation specified in the application and permit. Any alteration, installation, expansion or modification which was not submitted as a component of the permitted facility plan will require a written plan approval or permit amendment prior to implementation. Any expansion, modification, or other change in a facility process or operation which may result in an increase in emissions or discharges or may cause other detrimental environmental impacts from the Permittee's facility requires a new permit.

I. Applications for Permit Renewal, Amendment or Plan Approval

Application for a renewal of, or amendment to, a permit will be treated in the same manner as the initial application, except that public notice or hearing may not be required for applications for renewal or amendment. Application for renewal or amendment or plan approval must be made no later than 30 days before the expiration of the permit or the planned effective date of the amendment or change.

J. Transfers

This Department reserves the sole discretion to transfer this permit. The Permittee may request to transfer this permit to another proposed Permittee. The written request must include a certified signed affidavit from the proposed new Permittee stating that they accept this permit in its entirety. The permittee is responsible to insure that all terms and conditions of the permit are met until the transfer is approved. Transfer of the permit is only valid when written approval has been received from the department. Should operation of the facility be contracted or a change in contractors is made, the new contractor shall be notified of the existence of the permit and its conditions.

K. Termination

This permit terminates upon the expiration date. The Department has the authority to terminate a permit upon 30 days written notice if the Department finds that there has been a violation of the conditions of the permit.

L. Pollution Prevention

In order to prevent and minimize present and future pollution, when making management decisions that affect waste generation, the Permittee shall consider the following order of priority options, as outlined in AS 46.06.021:

1. Waste source reduction;
2. Recycling of waste;
3. Waste treatment; and
4. Waste disposal.

APPENDIX A

SURFACE WATER MONITORING PARAMETERS

Matrix	Analyses	Constituents	Maximum Allowable Concentration	Analytical Method	Comments
Water	pH conductivity temperature			Field Tests	
Water	metals	Arsenic(As) Barium(Ba) Calcium(Ca) Chromium(Cr) Chloride Lead(Pb) Magnesium(Mg) Sodium(Na) Zinc(Zn)	0.05 mg/L 2.0 mg/L N/A** 0.1 mg/L 250 mg/L 0.0032mg/L* N/A** 250.0 mg/L 5.0 mg/L	EPA series 6000 or 7000	Digestion method may be any approved EPA method for total recoverable metals.
Water	diesel range organics	C_{10}-C_{25} Organics	no sheen, no smell ***	AK102	Analysis requested to flag possible contamination
Water	volatile aromatic compounds	BTEX benzene toluene ethylbenzene isomers of xylene (para, meta, ortho xylene)]	 0.005mg/L 1.0 mg/L 0.7 mg/L 10.0 mg/L	EPA 8020 or equivalent	

* Based upon a hardness value of 100 mg/L.

** Calcium and Magnesium are used to calculate hardness and have no water quality criteria under State Water Quality Standards 18 AAC 70

*** There is no federal or state numeric analytical standard for DRO. For the purposes of this monitoring requirement, 1.0 mg/L of DRO is considered an action level to indicate there may be a contamination problem. Assessment monitoring, corrective action, or a risk-based assessment may be necessary to further assess the potential problem.

APPENDIX B
GRAVEL WASHING REUSE CRITERIA

Samples must be analyzed for Diesel Range Organics (DRO) and the total metals analysis listed below. Results should be reported on a dry weight basis (mg/kg or ppm). If a sample fails the primary criteria for leachable metals, a separate sample may be tested in accordance with the secondary criteria. The test results for the secondary criteria (leachable metals) should be measured according to a wet weight basis (mg/L).

Quality control samples are necessary to document the precision and accuracy of the analytical procedures and to demonstrate the absence of interferences and/or contamination from the glassware or reagents in the laboratory. For each set of samples sent to a laboratory, a series of quality control samples are required to ensure that the analytical results meet the data quality objectives for accuracy and precision. This may include method blanks, a matrix spike, and laboratory duplicates. Trip blanks may also be used to document that contamination has not been introduced to the samples either in the laboratory or in the field from improper sample handling.

TABLE OF REUSE CRITERIA

Matrix	Analyses	Constituents	Reuse Criteria	Comments
Washed Gravel Cuttings	**Primary Criteria**: Total Metals	Arsenic Barium Lead	Max. dry wt. 22 mg/kg 790 mg/kg 20 mg/kg	The digestion and analytical method may be any approved EPA method for total recoverable metals having detection limits less than the MCL.
Washed Gravel Cuttings	diesel range organics (DRO)	C_{10}-C_{25} Organics	100 mg/kg	AK102
Washed Gravel Cuttings	**Secondary Criteria**: Leachable Metals	Arsenic Barium Lead	Max. Wet wt. 0.016 mg/L 3.800 mg/L 0.011 mg/L	The digestion method will be by TCLP and analytical method may be any approved EPA method for leachable metals having detection limits less than the MCL.

The reuse criteria for metals were established from the gravel washing activity at the CC-2A facility and reported in the North Slope Soil and Gravel Background Database for BP Exploration (Alaska), Inc., December 1991. The reuse criterion for DRO was established from the Interim Guidance for Non-UST contaminated soil cleanup levels.